

GB

Page 1 of 28  
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
Revision date / version: 02.04.2025 / 0019  
Replacing version dated / version: 28.11.2024 / 0018  
Valid from: 02.04.2025  
PDF print date: 02.04.2025  
Grundierfueller  
Primer Filler

## Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

**Grundierfueller  
Primer Filler**

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture:

Priming  
Corrosion protection

#### Uses advised against:

No information available at present.

#### 1.3 Details of the supplier of the safety data sheet

GB

LIQUI MOLY GmbH  
Jerg-Wieland-Str. 4  
89081 Ulm-Lehr  
Tel.: (+49) 0731-1420-0  
Fax: (+49) 0731-1420-88

Qualified person's e-mail address: [info@chemical-check.de](mailto:info@chemical-check.de), [k.schnurbusch@chemical-check.de](mailto:k.schnurbusch@chemical-check.de) Please DO NOT use for requesting Safety Data Sheets.

#### 1.4 Emergency telephone number

#### Emergency information services / official advisory body:

GB

Landspítali- The National University Hospital of Iceland, tel. +354 543 2222 or 112 (valid only for Iceland)

#### Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (LMR)  
+1 872 5888271 (LMR)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
Eye Irrit.	2	H319-Causes serious eye irritation.
STOT SE	3	H336-May cause drowsiness or dizziness.
Aquatic Chronic	2	H411-Toxic to aquatic life with long lasting effects.
Aerosol	1	H222-Extremely flammable aerosol.
Aerosol	1	H229-Pressurised container: May burst if heated.

## 2.2 Label elements

### Labeling according to Regulation (EC) 1272/2008 (CLP)



Danger

H319-Causes serious eye irritation. H336-May cause drowsiness or dizziness. H411-Toxic to aquatic life with long lasting effects. H222-Extremely flammable aerosol. H229-Pressurised container: May burst if heated.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.  
 P210-Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211-Do not spray on an open flame or other ignition source. P251-Do not pierce or burn, even after use. P261-Avoid breathing vapours or spray. P271-Use only outdoors or in a well-ventilated area. P273-Avoid release to the environment. P280-Wear eye protection / face protection.  
 P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312-Call a POISON CENTRE / doctor if you feel unwell.  
 P405-Store locked up. P410+P412-Protect from sunlight. Do not expose to temperatures exceeding 50 °C.  
 P501-Dispose of contents / container to an approved waste disposal facility.

EUH066-Repeated exposure may cause skin dryness or cracking.

EUH208-Contains Reaction product: Bisphenol-A-Epichlorhydrin resins with average molecular weight > 700. May produce an allergic reaction.

Without adequate ventilation, formation of explosive mixtures may be possible.

n-butyl acetate  
 Acetone  
 Butan-1-ol

## 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

## SECTION 3: Composition/information on ingredients

Aerosol

### 3.1 Substances

n.a.

### 3.2 Mixtures

Dimethyl ether	Substance for which an EU exposure limit value applies.
Registration number (REACH)	01-2119472128-37-XXXX
Index	603-019-00-8
EINECS, ELINCS, NLP, REACH-IT List-No.	204-065-8
CAS	115-10-6
content %	25-<50
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Flam. Gas 1A, H220

Acetone	Substance for which an EU exposure limit value applies.
Registration number (REACH)	01-2119471330-49-XXXX
Index	606-001-00-8

GB

Page 3 of 28  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
 Revision date / version: 02.04.2025 / 0019  
 Replacing version dated / version: 28.11.2024 / 0018  
 Valid from: 02.04.2025  
 PDF print date: 02.04.2025  
 Grundierfueller  
 Primer Filler

<b>EINECS, ELINCS, NLP, REACH-IT List-No.</b>	200-662-2
<b>CAS</b>	67-64-1
<b>content %</b>	10-<25
<b>Classification according to Regulation (EC) 1272/2008 (CLP), M-factors</b>	EUH066 Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

<b>n-butyl acetate</b>	<b>Substance for which an EU exposure limit value applies.</b>
<b>Registration number (REACH)</b>	---
<b>Index</b>	607-025-00-1
<b>EINECS, ELINCS, NLP, REACH-IT List-No.</b>	204-658-1
<b>CAS</b>	123-86-4
<b>content %</b>	10-<25
<b>Classification according to Regulation (EC) 1272/2008 (CLP), M-factors</b>	EUH066 Flam. Liq. 3, H226 STOT SE 3, H336

<b>Xylene</b>	<b>Substance for which an EU exposure limit value applies.</b>
<b>Registration number (REACH)</b>	01-2119488216-32-XXXX
<b>Index</b>	601-022-00-9
<b>EINECS, ELINCS, NLP, REACH-IT List-No.</b>	215-535-7
<b>CAS</b>	1330-20-7
<b>content %</b>	1-<5
<b>Classification according to Regulation (EC) 1272/2008 (CLP), M-factors</b>	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
<b>Specific Concentration Limits and ATE</b>	ATE (dermal): 1100 mg/kg ATE (as inhalation, Dusts or mist): 1,5 mg/l/4h ATE (as inhalation, Vapours): 11 mg/l/4h

<b>Butan-1-ol</b>	
<b>Registration number (REACH)</b>	---
<b>Index</b>	603-004-00-6
<b>EINECS, ELINCS, NLP, REACH-IT List-No.</b>	200-751-6
<b>CAS</b>	71-36-3
<b>content %</b>	1-<3
<b>Classification according to Regulation (EC) 1272/2008 (CLP), M-factors</b>	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336
<b>Specific Concentration Limits and ATE</b>	ATE (oral): 500 mg/kg

<b>Zinc oxide</b>	
<b>Registration number (REACH)</b>	---
<b>Index</b>	030-013-00-7
<b>EINECS, ELINCS, NLP, REACH-IT List-No.</b>	215-222-5
<b>CAS</b>	1314-13-2
<b>content %</b>	1-<2,5
<b>Classification according to Regulation (EC) 1272/2008 (CLP), M-factors</b>	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)

<b>Trizinc bis(orthophosphate)</b>	
<b>Registration number (REACH)</b>	---
<b>Index</b>	030-011-00-6

Page 4 of 28  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
 Revision date / version: 02.04.2025 / 0019  
 Replacing version dated / version: 28.11.2024 / 0018  
 Valid from: 02.04.2025  
 PDF print date: 02.04.2025  
 Grundierfueller  
 Primer Filler

<b>EINECS, ELINCS, NLP, REACH-IT List-No.</b>	231-944-3
<b>CAS</b>	7779-90-0
<b>content %</b>	1-<2,5
<b>Classification according to Regulation (EC) 1272/2008 (CLP), M-factors</b>	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)

<b>Reaction product: Bisphenol-A-Epichlorhydrin resins with average molecular weight &gt; 700</b>	
<b>Registration number (REACH)</b>	---
<b>Index</b>	---
<b>EINECS, ELINCS, NLP, REACH-IT List-No.</b>	---
<b>CAS</b>	25036-25-3
<b>content %</b>	0,3-<1
<b>Classification according to Regulation (EC) 1272/2008 (CLP), M-factors</b>	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

The addition of the highest concentrations listed here can result in a classification. Only when this classification is listed in Section 2 does it apply. In all other cases the total concentration is below the classification.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

#### Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

If the person is unconscious, place in a stable side position and consult a doctor.

#### Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

#### Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

#### Ingestion

Typically no exposure pathway.

Rinse the mouth thoroughly with water.

Give copious water to drink - consult doctor immediately.

### 4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

The following may occur:

Irritation of the respiratory tract

Coughing

Headaches

Dizziness

Effects/damages the central nervous system

With long-term contact:

drying of the skin.

Dermatitis (skin inflammation)

Allergic reaction

### 4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

## SECTION 5: Firefighting measures

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)

Revision date / version: 02.04.2025 / 0019

Replacing version dated / version: 28.11.2024 / 0018

Valid from: 02.04.2025

PDF print date: 02.04.2025

Grundierfueller

Primer Filler

## 5.1 Extinguishing media

### Suitable extinguishing media

CO<sub>2</sub>

Extinction powder

Water jet spray

Alcohol resistant foam

### Unsuitable extinguishing media

High volume water jet

## 5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Toxic gases

Danger of bursting (explosion) when heated

Explosive vapour/air or gas/air mixtures.

## 5.3 Advice for firefighters

For personal protective equipment see Section 8.

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary.

Cool container at risk with water.

Dispose of contaminated extinction water according to official regulations.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### 6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.

Ensure sufficient ventilation, remove sources of ignition.

Avoid dust formation with solid or powder products.

Leave the danger zone if possible, use existing emergency plans if necessary.

Avoid contact with eyes or skin.

If applicable, caution - risk of slipping.

#### 6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

### 6.2 Environmental precautions

Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

### 6.3 Methods and material for containment and cleaning up

If spray or gas escapes, ensure ample fresh air is available.

Without adequate ventilation, formation of explosive mixtures may be possible.

Active substance:

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

### 6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

## SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

### 7.1 Precautions for safe handling

#### 7.1.1 General recommendations

Ensure good ventilation.

Avoid inhalation of the vapours.

Avoid contact with eyes or skin.

GB

Page 6 of 28  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
 Revision date / version: 02.04.2025 / 0019  
 Replacing version dated / version: 28.11.2024 / 0018  
 Valid from: 02.04.2025  
 PDF print date: 02.04.2025  
 Grundierfueller  
 Primer Filler

Keep away from sources of ignition - Do not smoke.  
 Take measures against electrostatic charging, if appropriate.  
 Do not use on hot surfaces.  
 Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.  
 Observe directions on label and instructions for use.  
 Use working methods according to operating instructions.

### 7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.  
 Wash hands before breaks and at end of work.  
 Keep away from food, drink and animal feedingstuffs.  
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.  
 Not to be stored in gangways or stair wells.  
 Store product closed and only in original packing.  
 Observe special regulations for aerosols!  
 Observe special storage conditions.  
 Do not store with flammable or self-igniting materials.  
 Keep protected from direct sunlight and temperatures over 50°C.  
 Store in a well-ventilated place.  
 Store cool.

### 7.3 Specific end use(s)

No information available at present.  
 Observe the instructions for good working practice and the recommendations for risk assessment.  
 Consult hazardous substance information systems, e.g. from the professional associations, the chemical industry or different industries, depending on the application (building materials, wood, chemistry, laboratory, leather, metal).

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

GB	Chemical Name	Dimethyl ether		
	WEL-TWA: 400 ppm (766 mg/m <sup>3</sup> ) (WEL-TWA), 1000 ppm (1920 mg/m <sup>3</sup> ) (EU)	WEL-STEL: 500 ppm (958 mg/m <sup>3</sup> ) (WEL-STEL)		---
	Monitoring procedures:	- Compur - KITA-123 S (549 129)		
	BMGV: ---		Other information: ---	

GB	Chemical Name	Acetone		
	WEL-TWA: 500 ppm (1210 mg/m <sup>3</sup> ) (WEL-TWA, EU)	WEL-STEL: 1500 ppm (3620 mg/m <sup>3</sup> ) (WEL-STEL)		---
	Monitoring procedures:	- Draeger - Acetone 100/b (CH 22 901) - Draeger - Acetone 40/a (5) (81 03 381) - Compur - KITA-102 SA (548 534) - Compur - KITA-102 SC (548 550) - Compur - KITA-102 SD (551 109) INSHT MTA/MA-031/A96 (Determination of ketones (acetone, methyl ethyl ketone, methyl isobutyl ketone) in air - Charcoal tube method / Gas chromatography) - 1996 - - EU project BC/CEN/ENTR/000/2002-16 card 67-1 (2004) MDHS 72 (Volatile organic compounds in air – Laboratory method using pumped solid sorbent tubes, thermal desorption and gas chromatography) - 1993 - NIOSH 1300 (KETONES I) - 1994 - NIOSH 2549 (VOLATILE ORGANIC COMPOUNDS (SCREENING)) - 1996 - NIOSH 2555 (KETONES I) - 2003 - NIOSH 3800 (ORGANIC AND INORGANIC GASES BY EXTRACTIVE FTIR SPECTROMETRY) - 2016 - OSHA 69 (Acetone) - 1988		
	BMGV: ---		Other information: ---	

GB	Chemical Name	n-butyl acetate		
	WEL-TWA: 150 ppm (724 mg/m <sup>3</sup> ) (WEL-TWA), 50 ppm (241 mg/m <sup>3</sup> ) (EU)	WEL-STEL: 200 ppm (966 mg/m <sup>3</sup> ) (WEL-STEL), 150 ppm (723 mg/m <sup>3</sup> ) (EU)		---
	Monitoring procedures:	- Compur - KITA-138 U (548 857) - Compur - KITA-139 SB(C) (549 731)		

GB

Page 7 of 28  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
 Revision date / version: 02.04.2025 / 0019  
 Replacing version dated / version: 28.11.2024 / 0018  
 Valid from: 02.04.2025  
 PDF print date: 02.04.2025  
 Grundierfueller  
 Primer Filler

- NIOSH 1450 (ESTERS 1) - 2003
- NIOSH 2549 (VOLATILE ORGANIC COMPOUNDS (SCREENING)) - 1996
- OSHA 1009 (n-Butyl Acetate Isobutyl Acetate sec-Butyl Acetate tert-Butyl Acetate) - 2007

BMGV: ---

Other information: ---

Chemical Name	Xylene		
WEL-TWA: 220 mg/m3 (50 ppm) (WEL-TWA), 50 ppm (221 mg/m3) (EU)	WEL-STEL: 100 ppm (441 mg/m3 (WEL-STEL), 100 ppm (442 mg/m3) (EU)	---	
Monitoring procedures:	<ul style="list-style-type: none"> <li>- Draeger - Xylene 10/a (67 33 161)</li> <li>- Compur - KITA-143 SA (550 325)</li> <li>- Compur - KITA-143 SB (505 998)</li> <li>- INSHT MTA/MA-030/A92 (Determination of aromatic hydrocarbons (benzene, toluene, ethylbenzene, p-xylene, 1,2,4-trimethylbenzene) in air - Charcoal tube method / Gas chromatography) - 1992 - EU project BC/CEN/ENTR/000/2002-16 card 47-1 (2004)</li> <li>- NIOSH 1501 (HYDROCARBONS, AROMATIC) - 2003</li> <li>- NIOSH 2549 (VOLATILE ORGANIC COMPOUNDS (SCREENING)) - 1996</li> <li>- OSHA 1002 (Xylenes (o-, m-, p-isomers) Ethylbenzene) - 1999</li> </ul>		
BMGV: 650 mmol methyl hippuric acid/mol creatinine in urine, post shift (Xylene, o-, m-, p- or mixed isomers) (BMGV)	Other information: Sk (WEL)		

Chemical Name	Butan-1-ol		
WEL-TWA: ---	WEL-STEL: 50 ppm (154 mg/m3)	---	
Monitoring procedures:	<ul style="list-style-type: none"> <li>- Draeger - Alcohol 25/a n-Butanol (81 01 631)</li> <li>- Compur - KITA-190 U(C) (548 873)</li> <li>- NIOSH 1400 (ALCOHOLS I) - 1994</li> <li>- NIOSH 1401 (ALCOHOLS II) - 1994</li> <li>- NIOSH 1405 (ALCOHOLS COMBINED) - 2003</li> <li>- NIOSH 2549 (VOLATILE ORGANIC COMPOUNDS (SCREENING)) - 1996</li> <li>- Draeger - Alcohol 100/a (CH 29 701)</li> </ul>		
BMGV: ---	Other information: Sk		

Dimethyl ether						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,155	mg/l	
	Environment - sediment, freshwater		PNEC	0,681	mg/kg	
	Environment - soil		PNEC	0,045	mg/kg	
	Environment - sewage treatment plant		PNEC	160	mg/l	
	Environment - marine		PNEC	0,016	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	1,549	mg/l	
	Environment - sediment, marine		PNEC	0,069	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	471	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	1894	mg/m3	

Acetone						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - marine		PNEC	1,06	mg/l	Assessment factor 500
	Environment - freshwater		PNEC	10,6	mg/l	Assessment factor 50

	Environment - sediment, freshwater		PNEC	30,4	mg/kg dw	
	Environment - sediment, marine		PNEC	3,04	mg/kg dw	
	Environment - soil		PNEC	29,5	mg/kg dw	
	Environment - sewage treatment plant		PNEC	100	mg/l	
	Environment - sporadic (intermittent) release		PNEC	21	mg/l	Assessment factor 100
Consumer	Human - oral	Long term, systemic effects	DNEL	62	mg/kg bw/day	Overall assessment factor 2
Consumer	Human - dermal	Long term, systemic effects	DNEL	62	mg/kg bw/day	Overall assessment factor 20
Consumer	Human - inhalation	Long term, systemic effects	DNEL	200	mg/m <sup>3</sup>	Overall assessment factor 5
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	186	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	2420	mg/m <sup>3</sup>	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	1210	mg/m <sup>3</sup>	

<b>n-butyl acetate</b>						
<b>Area of application</b>	<b>Exposure route / Environmental compartment</b>	<b>Effect on health</b>	<b>Descriptor</b>	<b>Value</b>	<b>Unit</b>	<b>Note</b>
	Environment - freshwater		PNEC	0,18	mg/l	
	Environment - marine		PNEC	0,018	mg/l	
	Environment - periodic release		PNEC	0,36	mg/l	
	Environment - sediment, freshwater		PNEC	0,981	mg/kg	
	Environment - sediment, marine		PNEC	0,0981	mg/kg	
	Environment - soil		PNEC	0,0903	mg/kg	
	Environment - sewage treatment plant		PNEC	35,6	mg/l	
Consumer	Human - dermal	Long term, systemic effects	DNEL	6	mg/kg	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	300	mg/m <sup>3</sup>	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	35,7	mg/m <sup>3</sup>	
Consumer	Human - dermal	Short term, systemic effects	DNEL	6	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	2	mg/kg bw/day	
Consumer	Human - oral	Short term, systemic effects	DNEL	2	mg/kg bw/day	
Consumer	Human - inhalation	Short term, local effects	DNEL	300	mg/m <sup>3</sup>	
Consumer	Human - inhalation	Long term, local effects	DNEL	35,7	mg/m <sup>3</sup>	
Workers / employees	Human - dermal	Long term, local effects	DNEL	11	mg/kg body weight/day	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	600	mg/m <sup>3</sup>	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	300	mg/m <sup>3</sup>	



Workers / employees	Human - dermal	Long term, systemic effects	DNEL	11	mg/kg bw/d	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	11	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	600	mg/m <sup>3</sup>	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	300	mg/m <sup>3</sup>	

<b>Xylene</b>						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - periodic release		PNEC	0,25	mg/l	
	Environment - sewage treatment plant		PNEC	6,58	mg/l	
	Environment - freshwater		PNEC	0,327	mg/l	
	Environment - marine		PNEC	0,327	mg/l	
	Environment - sediment, freshwater		PNEC	12,46	mg/kg dw	
	Environment - sediment, marine		PNEC	12,46	mg/kg dw	
	Environment - soil		PNEC	2,31	mg/kg dw	
Consumer	Human - inhalation	Short term, local effects	DNEL	174	mg/m <sup>3</sup>	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	174	mg/m <sup>3</sup>	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	14,8	mg/m <sup>3</sup>	
Consumer	Human - dermal	Long term, systemic effects	DNEL	108	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	1,6	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	289	mg/m <sup>3</sup>	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	289	mg/m <sup>3</sup>	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	77	mg/m <sup>3</sup>	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	180	mg/kg bw/day	

<b>Butan-1-ol</b>						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,082	mg/l	
	Environment - marine		PNEC	0,0082	mg/l	
	Environment - sewage treatment plant		PNEC	2476	mg/l	
	Environment - sediment, freshwater		PNEC	0,324	mg/kg dw	based on dry matter
	Environment - sediment, marine		PNEC	0,032	mg/kg dw	based on dry matter
	Environment - soil		PNEC	0,017	mg/kg dw	based on dry matter
	Environment - water, sporadic (intermittent) release		PNEC	2,25	mg/kg	
Consumer	Human - dermal	Long term, systemic effects	DNEL	3,125	mg/kg bw/d	

Consumer	Human - inhalation	Long term, systemic effects	DNEL	55,357	mg/m <sup>3</sup>	
Consumer	Human - oral	Long term, systemic effects	DNEL	1,562	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	310	mg/m <sup>3</sup>	

<b>Zinc oxide</b>						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	20,6	µg/l	
	Environment - marine		PNEC	6,1	µg/l	
	Environment - sewage treatment plant		PNEC	100	µg/l	
	Environment - sediment, freshwater		PNEC	117,8	mg/kg dw	
	Environment - sediment, marine		PNEC	56,5	mg/kg dw	
	Environment - soil		PNEC	35,6	mg/kg dw	
Consumer	Human - inhalation	Short term, local effects	DNEL	3,1	mg/m <sup>3</sup>	
Consumer	Human - inhalation	Long term, local effects	DNEL	1,5	mg/m <sup>3</sup>	
Consumer	Human - dermal	Long term, systemic effects	DNEL	83	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	2,5	mg/m <sup>3</sup>	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,83	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	83	mg/kg bw/day	
Workers / employees	Human - dermal	Short term, local effects	DNEL	6223	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, local effects	DNEL	83	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	0,5	mg/m <sup>3</sup>	
Workers / employees	Human - oral	Short term, local effects	DNEL	62,2	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	6,2	mg/m <sup>3</sup>	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	5	mg/m <sup>3</sup>	

<b>Trizinc bis(orthophosphate)</b>						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	20,6	µg/l	Zn
	Environment - marine		PNEC	6,1	µg/l	Zn
	Environment - sediment, freshwater		PNEC	117,8	mg/kg dry weight	Zn
	Environment - sediment, marine		PNEC	56,5	mg/kg dry weight	Zn
	Environment - soil		PNEC	35,6	mg/kg dw	Zn
	Environment - sewage treatment plant		PNEC	100	µg/l	Zn
Consumer	Human - dermal	Long term, systemic effects	DNEL	83	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	2,5	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,83	mg/kg bw/day	

GB

Page 11 of 28  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
 Revision date / version: 02.04.2025 / 0019  
 Replacing version dated / version: 28.11.2024 / 0018  
 Valid from: 02.04.2025  
 PDF print date: 02.04.2025  
 Grundierfueller  
 Primer Filler

Workers / employees	Human - dermal	Long term, systemic effects	DNEL	83	mg/kg bw/day	Zn, soluble
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	5	mg/m <sup>3</sup>	Zn, insoluble

GB - United Kingdom | WEL-TWA = Workplace Exposure Limit - Long-term exposure limit - 8-hour TWA (= time weighted average) reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).  
 (EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:  
 (8) = Inhalable fraction (2004/37/CE, 2017/164/EU). (9) = Respirable fraction (2004/37/CE, 2017/164/EU). (11) = Inhalable fraction (2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (2004/37/CE). |  
 | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit - 15-minute reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).  
 (EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:  
 (8) = Inhalable fraction (2004/37/EC, 2017/164/EU). (9) = Respirable fraction (2004/37/EC, 2017/164/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). |  
 | BMGV = Biological monitoring guidance value (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).  
 (EU) = Directive 98/24/EC or 2004/37/EC or SCOEL (Biological Limit Value - BLV, Recommendation from the Scientific Committee on Occupational Exposure Limits (SCOEL)) |  
 | Other information (EH40/2005 Workplace exposure limits (Fourth Edition 2020)): Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.  
 (EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, 2019/1831/EU or 2024/869/EU:  
 (13) = The substance can cause sensitisation of the skin and of the respiratory tract (98/24/EC, 2004/37/CE), (14) = The substance can cause sensitisation of the skin (2004/37/CE), (15) = Substantial contribution to the total body burden via dermal exposure possible. |

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.  
 If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.  
 Applies only if maximum permissible exposure values are listed here.  
 Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.  
 These are specified by e.g. EN 14042.  
 EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

### 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.  
 Wash hands before breaks and at end of work.  
 Keep away from food, drink and animal feedingstuffs.  
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:  
 Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:  
 Chemical resistant protective gloves (EN ISO 374).  
 Recommended  
 Protective gloves in butyl rubber (EN ISO 374).  
 Minimum layer thickness in mm:  
 >= 0,5  
 Permeation time (penetration time) in minutes:  
 <= 480

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.  
 The recommended maximum wearing time is 50% of breakthrough time.  
 Protective hand cream recommended.

Skin protection - Other:  
 Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:  
 If OES or MEL is exceeded.

Page 12 of 28  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
 Revision date / version: 02.04.2025 / 0019  
 Replacing version dated / version: 28.11.2024 / 0018  
 Valid from: 02.04.2025  
 PDF print date: 02.04.2025  
 Grundierfueller  
 Primer Filler

Filter A2 P2 (EN 14387), code colour brown, white  
 At high concentrations:  
 Respiratory protection appliance (insulation device) (e.g. EN 137 or EN 138)  
 Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:  
 Not applicable

Additional information on hand protection - No tests have been performed.  
 In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.  
 Selection of materials derived from glove manufacturer's indications.  
 Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.  
 Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.  
 In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.  
 The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

### 8.2.3 Environmental exposure controls

No information available at present.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Aerosol. Active substance: liquid.
Colour:	Grey
Odour:	Characteristic
Melting point/freezing point:	There is no information available on this parameter.
Boiling point or initial boiling point and boiling range:	There is no information available on this parameter.
Flammability:	Does not apply to aerosols.
Lower explosion limit:	1,2 Vol-%
Upper explosion limit:	18,6 Vol-%
Flash point:	-41 °C (The flash-point of the mixture was not tested, but complies with the ingredient with the lowest value. )
Auto-ignition temperature:	Does not apply to aerosols.
Decomposition temperature:	There is no information available on this parameter.
pH:	Mixture is non-soluble (in water).
Kinematic viscosity:	Does not apply to aerosols.
Solubility:	Insoluble
Partition coefficient n-octanol/water (log value):	Does not apply to mixtures.
Vapour pressure:	5200 hPa
Density and/or relative density:	-0,81 g/cm <sup>3</sup>
Density and/or relative density:	0,98 g/ml (Active substance )
Relative vapour density:	Does not apply to aerosols.
Particle characteristics:	Does not apply to aerosols.

### 9.2 Other information

Explosives:	Product is not explosive. When using: development of explosive vapour/air mixture possible.
Oxidising liquids:	No

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The product has not been tested.

### 10.2 Chemical stability

Stable with proper storage and handling.

### 10.3 Possibility of hazardous reactions

No dangerous reactions are known.

### 10.4 Conditions to avoid

Heating, open flame, ignition sources  
 Pressure increase will result in danger of bursting.

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)

Revision date / version: 02.04.2025 / 0019

Replacing version dated / version: 28.11.2024 / 0018

Valid from: 02.04.2025

PDF print date: 02.04.2025

Grundierfueller

Primer Filler

## 10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

Avoid contact with strong alkalis.

Avoid contact with strong acids.

## 10.6 Hazardous decomposition products

No decomposition when used as directed.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Possibly more information on health effects, see Section 2.1 (classification).

Grundierfueller Primer Filler						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Dimethyl ether						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by inhalation:	LC50	164	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:						Not irritant
Serious eye damage/irritation:						Not irritant
Respiratory or skin sensitisation:						No (skin contact)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:					OECD 477 (Genetic Toxicology - Sex-Linked Recessive Lethal Test in Drosophila melanogaster)	Negative
Carcinogenicity:	NOAEC	47000	mg/m3	Rat	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Negative
Reproductive toxicity:	NOAEL	5000	ppm	Rat	OECD 414 (Prenatal Developmental Toxicity Study)	
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEC	47106	mg/kg	Rat	OECD 452 (Chronic Toxicity Studies)	Negative(2 a)
Aspiration hazard:						No

<b>Acetone</b>						
<b>Toxicity / effect</b>	<b>Endpoint</b>	<b>Value</b>	<b>Unit</b>	<b>Organism</b>	<b>Test method</b>	<b>Notes</b>
Acute toxicity, by oral route:	LD50	5800-7190	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>15800	mg/kg	Rat		
Acute toxicity, by inhalation:	LC50	76	mg/l/4h	Rat		
Skin corrosion/irritation:				Guinea pig		Not irritant, Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitising
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Carcinogenicity:				Mouse		Negative, References
Reproductive toxicity (Developmental toxicity):	NOAEC	2200	ppm	Rat	OECD 414 (Prenatal Developmental Toxicity Study)	Negative
Specific target organ toxicity - single exposure (STOT-SE):						STOT SE 3, H336, May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	900	mg/kg bw/d	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
Symptoms:						unconsciousness, vomiting, headaches, gastrointestinal disturbances, fatigue, mucous membrane irritation, dizziness, nausea, drowsiness

<b>n-butyl acetate</b>						
<b>Toxicity / effect</b>	<b>Endpoint</b>	<b>Value</b>	<b>Unit</b>	<b>Organism</b>	<b>Test method</b>	<b>Notes</b>
Acute toxicity, by oral route:	LD50	10760-13100	mg/kg	Rat	OECD 423 (Acute Oral Toxicity - Acute Toxic Class Method)	Female
Acute toxicity, by dermal route:	LD50	>17600	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>21,1	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Vapours

Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant, Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Reproductive toxicity:	NOAEC	9640	mg/m3		OECD 416 (Two-generation Reproduction Toxicity Study)	Negative
Specific target organ toxicity - single exposure (STOT-SE):						May cause drowsiness or dizziness., STOT SE 3, H336
Specific target organ toxicity - repeated exposure (STOT-RE):						Negative
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	125	mg/kg	Rat	Regulation (EC) 440/2008 B.26 (SUB-CHRONIC ORAL TOXICITY TEST REPEATED DOSE 90 - DAY (RODENTS))	
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEC	500	ppm	Rat		
Symptoms:						unconsciousness , headaches, mucous membrane irritation, dizziness, nausea and vomiting.

<b>Xylene</b>						
<b>Toxicity / effect</b>	<b>Endpoint</b>	<b>Value</b>	<b>Unit</b>	<b>Organism</b>	<b>Test method</b>	<b>Notes</b>
Acute toxicity, by oral route:	LD50	3523	mg/kg	Rat		Does not conform with EU classification.
Acute toxicity, by dermal route:	LD50	12126	mg/kg	Rabbit		Does not conform with EU classification.
Acute toxicity, by dermal route:	ATE	1100	mg/kg			
Acute toxicity, by inhalation:	ATE	11	mg/l/4h			Vapours
Acute toxicity, by inhalation:	ATE	1,5	mg/l/4h			Dusts or mist
Acute toxicity, by inhalation:	LC50	27	mg/l/4h	Rat		Vapours, Does not conform with EU classification.
Skin corrosion/irritation:				Rabbit	(Draize-Test)	Irritant
Serious eye damage/irritation:				Rabbit		Irritant
Respiratory or skin sensitisation:					(Patch-Test)	Negative

Page 16 of 28  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
 Revision date / version: 02.04.2025 / 0019  
 Replacing version dated / version: 28.11.2024 / 0018  
 Valid from: 02.04.2025  
 PDF print date: 02.04.2025  
 Grundierfueller  
 Primer Filler

Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Specific target organ toxicity - single exposure (STOT-SE), inhalative:						Irritation of the respiratory tract
Aspiration hazard:						Yes
Symptoms:						breathing difficulties, drying of the skin., drowsiness, unconsciousness , burning of the membranes of the nose and throat, vomiting, skin afflictions, heart/circulatory disorders, coughing, headaches, drowsiness, dizziness, nausea

Butan-1-ol						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	500	mg/kg			
Acute toxicity, by dermal route:	LD50	3430	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit		Skin Irrit. 2
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	No (skin contact)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	References, Negative
Germ cell mutagenicity:				Mammalian	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Specific target organ toxicity - single exposure (STOT-SE):						May cause respiratory irritation., STOT SE 3, H335, May cause drowsiness or dizziness., STOT SE 3, H336
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOEL	125	mg/kg bw/d	Rat		



Page 17 of 28  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
 Revision date / version: 02.04.2025 / 0019  
 Replacing version dated / version: 28.11.2024 / 0018  
 Valid from: 02.04.2025  
 PDF print date: 02.04.2025  
 Grundierfueller  
 Primer Filler

Symptoms:						respiratory distress, drowsiness, unconsciousness, drop in blood pressure, heart/circulatory disorders, coughing, headaches, intoxication, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting.
-----------	--	--	--	--	--	--

Zinc oxide						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 423 (Acute Oral Toxicity - Acute Toxic Class Method)	
Acute toxicity, by dermal route:	LD50	> 2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>5,7	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitising
Germ cell mutagenicity:					(Ames-Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative Chinese hamster
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Reproductive toxicity:				Rat	OECD 416 (Two-generation Reproduction Toxicity Study)	Negative, Analogous conclusion

Page 18 of 28  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
 Revision date / version: 02.04.2025 / 0019  
 Replacing version dated / version: 28.11.2024 / 0018  
 Valid from: 02.04.2025  
 PDF print date: 02.04.2025  
 Grundierfueller  
 Primer Filler

Symptoms:						breathing difficulties, chest pain (thorax pain), diarrhoea, fever, joint pain, coughing, headaches, circulatory disorders, metal fume fever, muscle pains, mucous membrane irritation, nausea and vomiting.
-----------	--	--	--	--	--	--

Trizinc bis(orthophosphate)						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by inhalation:	LC50	>5,7	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Analogous conclusion, Dust, Mist
Skin corrosion/irritation:						Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact), Analogous conclusion
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative, Analogous conclusion
Germ cell mutagenicity:						Analogous conclusion, Negative
Carcinogenicity:						Analogous conclusion, Negative
Reproductive toxicity:						Analogous conclusion, Negative
Specific target organ toxicity - single exposure (STOT-SE):						Analogous conclusion, No
Specific target organ toxicity - single exposure (STOT-SE), inhalative:						Not irritant (respiratory tract)., Analogous conclusion
Specific target organ toxicity - repeated exposure (STOT-RE):						Analogous conclusion, No
Symptoms:						breathing difficulties, fever, headaches, stomach pain, dizziness, nausea and vomiting.

Reaction product: Bisphenol-A-Epichlorhydrin resins with average molecular weight > 700						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes

Page 19 of 28  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
 Revision date / version: 02.04.2025 / 0019  
 Replacing version dated / version: 28.11.2024 / 0018  
 Valid from: 02.04.2025  
 PDF print date: 02.04.2025  
 Grundierfueller  
 Primer Filler

Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 420 (Acute Oral toxicity - Fixe Dose Procedure)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:					OECD 404 (Acute Dermal Irritation/Corrosion)	Irritant
Skin corrosion/irritation:						Irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Irritant
Respiratory or skin sensitisation:					OECD 406 (Skin Sensitisation)	Sensitising (skin contact)
Germ cell mutagenicity:					OECD 478 (Genetic Toxicology - Rodent dominant Lethal Test)	Negative
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Carcinogenicity:				Rat	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Negative

## 11.2. Information on other hazards

Grundierfueller Primer Filler						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Endocrine disrupting properties:						Does not apply to mixtures.
Other information:						No other relevant information available on adverse effects on health.

Trizinc bis(orthophosphate)						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Endocrine disrupting properties:						No

## SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

Grundierfueller Primer Filler							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							n.d.a.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Endocrine disrupting properties:							Does not apply to mixtures.

12.7. Other adverse effects:							No information available on other adverse effects on the environment.
Other information:							DOC-elimination degree (complexing organic substance) $\geq$ 80%/28d: No
Other information:	AOX			%			According to the recipe, contains no AOX.

**Dimethyl ether**

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC0	96h	2695	mg/l	Pimephales promelas		
12.1. Toxicity to fish:	LC50	96h	3082	mg/l	Salmo gairdneri		
12.1. Toxicity to fish:	LC50	96h	>4,1	mg/l	Poecilia reticulata		
12.1. Toxicity to daphnia:	EC50	48h	>4,4	mg/l	Daphnia magna		
12.1. Toxicity to algae:	EC50	96h	154,9	mg/l	Chlorella vulgaris		
12.2. Persistence and degradability:		28d	5	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Not readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		-0,07				Bioaccumulation is unlikely (LogPow < 1). 25°C (pH 7)
12.4. Mobility in soil:	H (Henry)		518,6	Pa*m <sup>3</sup> /mol			No adsorption in soil.
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10		>1600	mg/l	Pseudomonas putida		
Water solubility:			45,60	mg/l			25°C

**Acetone**

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	5540	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to fish:	LC50	96h	7500	mg/l	Leuciscus idus		
12.1. Toxicity to fish:	LC50	96h	8300	mg/l	Lepomis macrochirus		
12.1. Toxicity to fish:	EC50	96h	8300	mg/l	Lepomis macrochirus		
12.1. Toxicity to daphnia:	NOEC/NOEL	28d	2212	mg/l	Daphnia pulex	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	EC50	48h	6100-12700	mg/l	Daphnia magna		
12.1. Toxicity to daphnia:	EC50	48h	8800	mg/l	Daphnia pulex	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	48h	4740	mg/l	Pseudokirchneriella subcapitata		
12.1. Toxicity to algae:	NOEC/NOEL	48h	3400	mg/l	Pseudokirchneriella subcapitata		

Page 21 of 28  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
 Revision date / version: 02.04.2025 / 0019  
 Replacing version dated / version: 28.11.2024 / 0018  
 Valid from: 02.04.2025  
 PDF print date: 02.04.2025  
 Grundierfueller  
 Primer Filler

12.1. Toxicity to algae:	NOEC/NOEL	8d	530	mg/l		DIN 38412 T.9	Test organism: M. aeruginosa
12.2. Persistence and degradability:		30d	81-92	%		Regulation (EC) 440/2008 C.4-E (DETERMINATION OF 'READY' BIODEGRADABILITY - CLOSED BOTTLE TEST)	Readily biodegradable
12.2. Persistence and degradability:		28d	91	%		OECD 301 A (Ready Biodegradability - DOC Die-Away Test)	Readily biodegradable
12.2. Persistence and degradability:		28d	91	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		-0,24			OECD 107 (Partition Coefficient (n-octanol/water) - Shake Flask Method)	
12.3. Bioaccumulative potential:	BCF		3				Low
12.4. Mobility in soil:							No adsorption in soil.
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10	30min	1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Toxicity to bacteria:	BOD/COD	16h	1700	mg/l	Pseudomonas putida		
Other organisms:	EC5	72h	28	mg/l	Entosiphon sulcatum		
Other information:	BOD5		1760-1900	mg/g			
Other information:	AOX		0	%			
Other information:	COD		2070-2100	mg/g			

n-butyl acetate							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	18	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	44	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	23	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	

12.1. Toxicity to algae:	EC50	72h	397	mg/l	Scenedesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	83	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		2,3			OECD 117 (Partition Coefficient (n-octanol/water) - HPLC method)	Low
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50		356	mg/l			Tetrahymena pyriformis

**Xylene**

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	2,6	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to daphnia:	EC50	48h	1	mg/l	Daphnia magna		
12.1. Toxicity to algae:	EC50	72h	2,2	mg/l			
12.1. Toxicity to algae:	NOEC/NOEL		0,44	mg/l			
12.2. Persistence and degradability:			>60	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		3				A notable biological accumulation potential is not to be expected (LogPow 1-3).
12.3. Bioaccumulative potential:	BCF		25,9				

**Butan-1-ol**

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	1376	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	4,1	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to algae:	EC50	96h	225	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	98	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable
12.3. Bioaccumulative potential:	BCF		3,16				calculated value, Not to be expected
12.3. Bioaccumulative potential:	Log Pow		1			OECD 117 (Partition Coefficient (n-octanol/water) - HPLC method)	

12.4. Mobility in soil:	Koc		3,471				calculated value <sub>20°C</sub>
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10	17h	2476	mg/l	Pseudomonas putida	DIN 38412 T.8	References

**Zinc oxide**

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	1,1-2,5	ppm	Oncorhynchus mykiss		
12.1. Toxicity to daphnia:	EC50	48h	1	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	EC50	48h	0,413-0,83	mg/l	Ceriodaphnia spec.	U.S. EPA ECOTOX Database	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,04	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to algae:	EC50	72h	0,136	mg/l	Selenastrum capricornutum	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	0,017	mg/l	Pseudokirchneriella subcapitata		
12.1. Toxicity to algae:	EC50	72h	0,136	mg/l	Scenedesmus quadricauda	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:							Not relevant for inorganic substances.
12.3. Bioaccumulative potential:							Not relevant for inorganic substances.
12.4. Mobility in soil:			158,5	L/kg			
12.4. Mobility in soil:	Log Koc		2,2				
12.5. Results of PBT and vPvB assessment							Not relevant for inorganic substances.
Toxicity to bacteria:	EC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

**Trizinc bis(orthophosphate)**

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	0,09	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to fish:	LC50	96h	0,177	mg/l	Oncorhynchus mykiss	U.S. EPA ECOTOX Database	
12.1. Toxicity to daphnia:	EC50	48h	28,2	mg/l	Daphnia magna		
12.1. Toxicity to algae:	ErC50	72h	11	mg/l	Desmodesmus subspicatus		
12.1. Toxicity to algae:	EC50	72h	0,136-0,15	mg/l	Selenastrum capricornutum		Analogous conclusion

Page 24 of 28  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
 Revision date / version: 02.04.2025 / 0019  
 Replacing version dated / version: 28.11.2024 / 0018  
 Valid from: 02.04.2025  
 PDF print date: 02.04.2025  
 Grundierfueller  
 Primer Filler

12.5. Results of PBT and vPvB assessment							Not relevant for inorganic substances.
12.6. Endocrine disrupting properties:							No
Toxicity to bacteria:	NOEC/NOEL	4h	0,1	mg/l	activated sludge		Analogous conclusion
Water solubility:							Insoluble Wasserlöslichkeit <0,1% (DIN ISO 787, Teil 3) bzw. 0,025 g Zn/l (67/548/EWG, Anh. V, C)

Reaction product: Bisphenol-A-Epichlorhydrin resins with average molecular weight > 700							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	>100	mg/l	Chlorella vulgaris	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	5	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Not biodegradable
12.3. Bioaccumulative potential:	BCF		31				
12.4. Mobility in soil:	Koc		445				
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

16 05 04 gases in pressure containers (including halons) containing hazardous substances

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

Take full aerosol cans to problem waste collection.

Take emptied aerosol cans to valuable material collection.

#### For contaminated packing material

Pay attention to local and national official regulations.

Recommendation:

Do not perforate, cut up or weld uncleaned container.

Recycling

15 01 04 metallic packaging



Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)

Revision date / version: 02.04.2025 / 0019

Replacing version dated / version: 28.11.2024 / 0018

Valid from: 02.04.2025

PDF print date: 02.04.2025



Grundierfueller

Primer Filler



## SECTION 14: Transport information

### General statements

#### Transport by road/by rail (ADR/RID)

14.1. UN number or ID number:	1950	
14.2. UN proper shipping name:	UN 1950 AEROSOLS	
14.3. Transport hazard class(es):	2.1	
14.4. Packing group:	-	
14.5. Environmental hazards:	environmentally hazardous	
Tunnel restriction code:	D	
Classification code:	5F	
LQ:	1 L	
Transport category:	2	

#### Transport by sea (IMDG-code)

14.1. UN number or ID number:	1950	
14.2. UN proper shipping name:	UN 1950 AEROSOLS	
14.3. Transport hazard class(es):	2.1	
14.4. Packing group:	-	
14.5. Environmental hazards:	environmentally hazardous	
Marine Pollutant:	Yes	
EmS:	F-D, S-U	

#### Transport by air (IATA)

14.1. UN number or ID number:	1950	
14.2. UN proper shipping name:	UN 1950 Aerosols, flammable	
14.3. Transport hazard class(es):	2.1	
14.4. Packing group:	-	
14.5. Environmental hazards:	Not applicable	

#### 14.6. Special precautions for user

Persons employed in transporting dangerous goods must be trained.

All persons involved in transporting must observe safety regulations.

Precautions must be taken to prevent damage.

#### 14.7. Maritime transport in bulk according to IMO instruments

Freight as packaged goods rather than in bulk, therefore not applicable.

Minimum amount regulations have not been taken into account.

Danger code and packing code on request.

Comply with special provisions.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Observe restrictions:

Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)!

This product is regulated by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

For exceptions see Regulation (EU) 2019/1148 and guidelines for the implementation of Regulation (EU) 2019/1148.

Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)!

Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

Page 26 of 28  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
 Revision date / version: 02.04.2025 / 0019  
 Replacing version dated / version: 28.11.2024 / 0018  
 Valid from: 02.04.2025  
 PDF print date: 02.04.2025  
 Grundierfueller  
 Primer Filler

Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Lower-tier requirements	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Upper-tier requirements
E2		200	500
P3a	11.1	150 (netto)	500 (netto)

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC): 84,76 %

Observe incident regulations.

National requirements/regulations on safety and health protection must be applied when using work equipment.

## 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

## SECTION 16: Other information

Revised sections: 14  
 Employee training in handling dangerous goods is required.  
 These details refer to the product as it is delivered.  
 Employee instruction/training in handling hazardous materials is required.

### Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Eye Irrit. 2, H319	Classification according to calculation procedure.
STOT SE 3, H336	Classification according to calculation procedure.
Aquatic Chronic 2, H411	Classification according to calculation procedure.
Aerosol 1, H222	Classification according to calculation procedure.
Aerosol 1, H229	Classification based on the form or physical state.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents.

H225 Highly flammable liquid and vapour.  
 H226 Flammable liquid and vapour.  
 H302 Harmful if swallowed.  
 H304 May be fatal if swallowed and enters airways.  
 H312 Harmful in contact with skin.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H318 Causes serious eye damage.  
 H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.  
 H335 May cause respiratory irritation.  
 H336 May cause drowsiness or dizziness.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 H400 Very toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.  
 H220 Extremely flammable gas.  
 H412 Harmful to aquatic life with long lasting effects.  
 EUH066 Repeated exposure may cause skin dryness or cracking.

Eye Irrit. — Eye irritation

Page 27 of 28  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)  
 Revision date / version: 02.04.2025 / 0019  
 Replacing version dated / version: 28.11.2024 / 0018  
 Valid from: 02.04.2025  
 PDF print date: 02.04.2025  
 Grundierfueller  
 Primer Filler

STOT SE — Specific target organ toxicity - single exposure - narcotic effects  
 Aquatic Chronic — Hazardous to the aquatic environment - chronic  
 Aerosol — Aerosols  
 Flam. Gas — Flammable gases - Flammable gas  
 Flam. Liq. — Flammable liquid  
 Acute Tox. — Acute toxicity - dermal  
 Acute Tox. — Acute toxicity - inhalation  
 Skin Irrit. — Skin irritation  
 STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation  
 STOT RE — Specific target organ toxicity - repeated exposure  
 Asp. Tox. — Aspiration hazard  
 Acute Tox. — Acute toxicity - oral  
 Eye Dam. — Serious eye damage  
 Aquatic Acute — Hazardous to the aquatic environment - acute  
 Skin Sens. — Skin sensitization

### Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.  
 Guidelines for the preparation of safety data sheets as amended (ECHA).  
 Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).  
 Safety data sheets for the constituent substances.  
 ECHA Homepage - Information about chemicals.  
 GESTIS Substance Database (Germany).  
 German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).  
 EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.  
 National Lists of Occupational Exposure Limits for each country as amended.  
 Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

### Any abbreviations and acronyms used in this document:

acc., acc. to according, according to  
 ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 AOX Adsorbable organic halogen compounds  
 approx. approximately  
 Art., Art. no. Article number  
 ASTM ASTM International (American Society for Testing and Materials)  
 ATE Acute Toxicity Estimate  
 BAM Bundesanstalt für Materialforschung und -prüfung (= Federal Institute for Materials Research and Testing, Germany)  
 BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)  
 BCF Bioconcentration factor  
 BSEF The International Bromine Council  
 CAS Chemical Abstracts Service  
 CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)  
 CMR carcinogenic, mutagenic, reproductive toxic  
 DMEL Derived Minimum Effect Level  
 DNEL Derived No Effect Level  
 DOC Dissolved organic carbon  
 e.g. for example (abbreviation of Latin 'exempli gratia'), for instance  
 EbCx, EyCx, EBLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)  
 EC European Community  
 ECHA European Chemicals Agency  
 ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect  
 EEC European Economic Community  
 EINECS European Inventory of Existing Commercial Chemical Substances  
 ELINCS European List of Notified Chemical Substances  
 EN European Norms  
 EPA United States Environmental Protection Agency (United States of America)  
 ErCx, EμCx, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)

etc.	et cetera
EU	European Union
EVAL	Ethylene-vinyl alcohol copolymer
Fax.	Fax number
gen.	general
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
GWP	Global warming potential
Koc	Adsorption coefficient of organic carbon in the soil
Kow	octanol-water partition coefficient
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC (Code)	International Bulk Chemical (Code)
IMDG-code	International Maritime Code for Dangerous Goods
incl.	including, inclusive
IUCLID	International Uniform Chemical Information Database
IUPAC	International Union for Pure Applied Chemistry
LC50	Lethal Concentration to 50 % of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
Log Koc	Logarithm of adsorption coefficient of organic carbon in the soil
Log Kow, Log Pow	Logarithm of octanol-water partition coefficient
LQ	Limited Quantities
MARPOL	International Convention for the Prevention of Marine Pollution from Ships
mg/kg bw	mg/kg body weight
mg/kg bw/d, mg/kg bw/day	mg/kg body weight/day
mg/kg dw	mg/kg dry weight
mg/kg wwt	mg/kg wet weight
n.a.	not applicable
n.av.	not available
n.c.	not checked
n.d.a.	no data available
NIOSH	National Institute for Occupational Safety and Health (USA)
NLP	No-longer-Polymer
NOEC, NOEL	No Observed Effect Concentration/Level
OECD	Organisation for Economic Co-operation and Development
org.	organic
OSHA	Occupational Safety and Health Administration (USA)
PBT	persistent, bioaccumulative and toxic
PE	Polyethylene
PNEC	Predicted No Effect Concentration
ppm	parts per million
PVC	Polyvinylchloride
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
REACH-IT List-No.	6/7/8/9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
RID	Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
SVHC	Substances of Very High Concern
Tel.	Telephone
TOC	Total organic carbon
UN RTDG	United Nations Recommendations on the Transport of Dangerous Goods
VOC	Volatile organic compounds
vPvB	very persistent and very bioaccumulative

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:

**Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90**

© by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.